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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,996	10/02/2003	Hiroyuki Koide	00862.023261.	7786
5514	7590	04/20/2005	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			JONES, JUDSON	
			ART UNIT	PAPER NUMBER
			2834	

DATE MAILED: 04/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/675,996

Applicant(s)

KOIDE, HIROYUKI

Examiner

Judson H. Jones

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,6 and 8-10 is/are rejected.
- 7) ☒ Claim(s) 3-5 and 7 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 6 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Novak et al. 5,623,853. Novak et al. discloses a first Y direction actuator having a stator 20 and a movable element 22b wherein the stator is driven by a second X direction actuator in a direction to suppress rotation of the stator 20 as described in Novak et al. column 16 lines 8-24.

In regard to claim 2, see Novak et al. column 15 lines 59-64.

In regard to claim 6, see Novak et al. column 15 lines 59-64 and see column 15 lines 28-36. The manipulated variable is the output of the position measuring system.

In regard to claim 8, the reaction force is the force that cause stator 20 to yaw. When linear motors 110a, 110b are driven to counteract the yaw, they cause the stator to absorb the reaction force.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9 and 10 rejected under 35 U.S.C. 103(a) as being unpatentable over Novak et al. in view of Nishi 6,396,568 B1. Novak et al. teaches that his device is for microlithography in column 1 lines 12 and 13 and discloses exposure in column 1 line 20. The additional details present in claims 9 and 10 such as applying a photosensitive material onto a resist and using an optical system to irradiate the photosensitive material are details of a microlithography system. See Nishi column 1 lines 7 ½ -12 ½ where a general description of a photolithography process is given. Photolithography for semiconductors is what Novak et al. is calling microlithography. Instead of using the word “master” used by applicant in claim 9, Nishi mentions transferring a mask pattern. The mask pattern is the master. Nishi mentions “a photosensitive substrate” in lines 8 and 9 of column 1 and mentions “photoresist coated on wafer (W)” in column 1 line 36 ½. In column 1 lines 15 ½ to 19 ½ Nishi states that the wafer coated with photoresist forms the photosensitive substrate. The step of applying a photosensitive material on a substrate is implied in the Nishi reference and is inherent. The developing step present in applicant’s claim 10 is mentioned in Nishi column 1 38 ½ to 40 ½. Nishi does not use the word “irradiate.” Nishi states “exposes the photoresist coated on wafer (W) under the illumination light.” This exposure is the irradiation step. Since Nishi and Novak et al. are from the same field of endeavor it would have been obvious at the time the invention was made for one of ordinary skill in the art to have utilized Nishi to supply details on the microlithography method that were not provided in Novak et al.

Allowable Subject Matter

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Claims 3-5 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art of record does not disclose or teach controlling a second actuator on the basis of acceleration of a movable element as recited in claim 3. Novak et al. mentions acceleration in column 10 lines 55-58 and states that the counter force from acceleration of the movable element 22b is not transferred to the beam 20 (the stator of the first actuator). Thus Novak et al. does not control the second actuator on the basis of acceleration. The prior art of record does not disclose or teach anything about the barycenter of the stator in combination with the other features of claim 7.

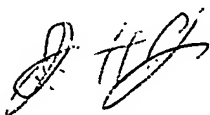
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Shiraishi 5,335,044 teaches 4 different exposure methods, with the barycenter being a part of the 4th method. Pastor 6,279,490 B1 shows a first actuator 10 and a second actuator 8 with the stator of 1st actuator driven by the second actuator. Pastor is concerned with yaw but in the Pastor device element 12 is rotated to counter-act yaw.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Judson H. Jones whose telephone number is 571-272-2025. The examiner can normally be reached on 8-4:30 M-F.

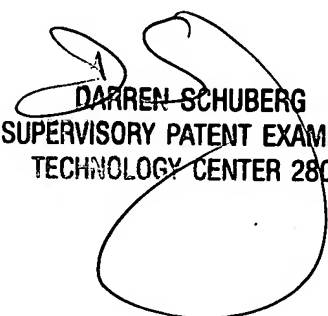
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Judson Jones 4/13/2005



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